

Compact Facility Legislative Oversight Committee

Report to the
86th Legislature



December 2018

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December 1, 2018

The Honorable Brian Birdwell
Senate Committee on Natural Resources and Economic Development
P.O. Box 12068
Austin, Texas 78711

The Honorable Joe Pickett
House Committee on Environmental Regulation
P.O. Box 2910
Austin, Texas 78768

Dear Chairman Birdwell and Chairman Pickett:

House Bill 2662, passed by the 85th Legislature during the regular session, established the Joint Compact Facility Legislative Oversight Committee. The Committee submits this report in accordance with HB 2662. The Committee has carefully considered all the testimony received on this issue and looks forward to continued discussions during the 86th legislative session.

Respectfully submitted,

Handwritten signature of Brian Birdwell in black ink.

Senator Brian Birdwell, Co-Chair

Handwritten signature of Don Huffines in black ink.

Senator Don Huffines

Handwritten signature of Kel Seliger in black ink.

Senator Kel Seliger

Handwritten signature of Brandon Hurley in black ink.

Chair Brandon Hurley, Compact Commission

Handwritten signature of Joe C. Pickett in black ink.

Representative Joe Pickett, Co-Chair

Handwritten signature of John Cyrier in black ink.

Representative John Cyrier

Handwritten signature of Brooks Landgraf in black ink.

Representative Brooks Landgraf

Handwritten signature of June Tierney in blue ink.

Commissioner June Tierney, Vermont

Hearings Held

September 6, 2018 Capitol Extension Rm. E1.012

The Joint Committee heard invited and public testimony.

Discussion and Recommendations

Assessment of the Texas Low-Level Radioactive Waste Disposal Compact Facility

Charge to Joint Committee

Assessment of the Texas Low-Level Radioactive Waste Disposal Compact facility to include recommendations relating to costs, fees, and any other matters the legislative oversight committee determines are relevant to the compact facility and oversight of the compact facility. Report must include the results of the assessment.

I. Background

Texas and Vermont are currently members of Texas Low-Level Radioactive Waste Disposal Compact ("Compact") for the purposes of assuring that each state is able to efficiently and safely dispose of low-level radioactive waste. Per the terms of the Compact, Texas serves as the host state, meaning that Texas is responsible for providing a Compact Waste Facility (CWF) to dispose of low-level waste generated within each state. In exchange for serving as the host state, Texas received \$25 million from Vermont.¹ The Compact created the Texas Low Level Radioactive Waste Disposal Compact Commission (TLLRWDC) whose primary responsibility is to ensure capacity at the CWF is available for the in-compact generators.²

By far the largest generators of low-level waste are the nuclear power plants in each state. There are two operational plants located in Texas, and one plant in Vermont which is expected to begin decommissioning in late 2019. Other generators include universities and hospitals and research facilities. The in-compact generators are represented by the Advocates for Responsible Disposal in Texas (ARDT).

The Compact creates a distinction between "in-compact waste" and "imported waste" or "non-compact waste." In-compact waste refers to waste generated from within the member states of Texas and Vermont. Imported waste, or non-compact waste, is waste generated in any other state. There are currently 34 states that are not in a Compact or do not have a facility at which they can dispose of certain classes of low-level waste, namely Class B and Class C waste.³

In order to satisfy Texas' obligations under the Compact, the state initially took steps to develop a CWF known as the Sierra Blanca site in Hudspeth County. The site was ultimately unsuccessful in obtaining a license from the Texas Natural Resource Conservation Commission. Subsequently, the legislature created a regulatory structure that allowed for a private operator to receive a permit to construct and operate the Compact Waste Facility. Waste Control Specialists (WCS) applied for, and was granted, a permit from the Texas Commission on Environmental Quality (TCEQ), the regulatory agency responsible for permitting radioactive waste in Texas⁴. WCS then financed

¹ See P.L. 105-236, The U.S. Congress ratified a Compact between Texas, Maine and Vermont for disposal of low-level radioactive waste with the passage of the Compact Consent Act, PL 105-236 in 1998.

² *Id.*

³ See 10 C.F.R. § 61.55. Radioactive waste is classified by its degree of radioactivity. Low-level waste is classified as either A, B, or C with A being the least radioactive and C being the most radioactive.

⁴ See Tex. Health & Safety Code § 401.011(b).

the construction of the CWF, understanding that the state assumes legal liability for the waste buried at the CWF.

Since opening in 2012, WCS has operated at a loss and there is continued concern that the current regulatory scheme, including fee allocation, is prohibitively cumbersome and that it may prevent any owner of the Facility from operating at a profit.

II. Waste Disposal Rates for In-Compact Generators (Ratemaking) (TX Health & Safety Code 401.245)

In-compact generators of low-level radioactive waste are statutorily mandated to pay a rate to the Compact Waste Facility operator when disposing of waste at the Facility.⁵ Section 401.245 of the Texas Health and Safety Code charges TCEQ with establishing, by rule, a party state disposal rate.⁶ TCEQ must base this rate on various criteria including:

- projected annual volume of waste to be disposed
- the relative hazard of the waste
- costs necessary for the operation and maintenance of the facility
- providing that the operator is able to receive a reasonable profit
- costs for future decommissioning, closing, and other post-closing activities
- providing funding for local public projects
- providing a reasonable rate of return on capital investments by the operator
- providing a sufficient amount to pay for mandated rates
- costs associated with providing security at the facility
- providing support for Texas Low-Level Radioactive Waste Disposal Compact Commission⁷

In developing these rates the legislature directed that, "to the extent practicable, [TCEQ] shall use the methods used by the Public Utility Commission of Texas's (PUCT) methods for ratemaking when establishing overall revenues, reasonable return, and invested capital."⁸

TCEQ Rate Setting

The rate established by TCEQ serves as the maximum rate which in-compact generators can be charged and the minimum rate that out-of-compact generators can be charged to dispose of waste at the Compact Waste Facility.⁹ This currently serves the purpose of guaranteeing that in-compact generators will never pay more than out-of-compact state generators, but does not establish specific prices for disposal. The operator, WCS, still negotiates disposal prices via contract with both in-compact and out-of-compact generators in accordance with this current statutory requirement to ensure that in-compact generators receive a lower price than out-

⁵ See Tex. Health & Safety Code § 401.245.

⁶ *Id.*

⁷ *Id.* at § 401.246.

⁸ See Tex. Health & Safety Code § 401.246(b).

⁹ *Id.* at § 401.2456(c).

of-compact generators. However, since the private operator and party state generators negotiated a rate, TCEQ has not conducted a rate case to calculate an appropriate rate.¹⁰

Market Conditions and Public Utility Rate Model

Unlike most industries regulated by the PUCT, WCS is a for-profit business that participates in a competitive market place. The in-compact generators have alternatives to disposing of waste at the Compact Facility, and consistently exercise that option due to market conditions. The most frequently utilized alternative is the EnergySolutions facility in Clive, UT which can only accept Class A waste. Additionally, generators of low-level waste are fundamentally different from a typical regulated utilities' captive customer base due to the alternative disposal and storage options available to generators. This makes it difficult, if not impossible, to create waste stream projections, which are paramount in developing a rate structure that meets the above criteria. This inability to predict a rate of disposal is an obstacle to calculating an appropriate rate to cover costs and provide a reasonable profit to the operator, or meet the other statutory requirements. If a model reflecting conservative waste stream projections is utilized it results in a higher rate, and a higher rate would likely result in the generators exercising alternative options to disposal at the Compact Facility.

Stakeholder Testimony to the Oversight Committee

WCS has requested that the rates of non-party state generators be untethered from the current rate rule so that they can freely negotiate prices as the market dictates.¹¹ WCS is not seeking to remove the rate ceiling for in-compact generators, which would serve to ensure that in-compact generators continue to receive a rate lower than out-of-compact generators. One scenario in which WCS could potentially consider offering a lower rate to out-of-compact generators might be a bulk disposal discount if an out-of-compact generator were to contractually commit to disposal of a certain amount of waste. WCS also told the Oversight Committee that the flexibility to negotiate with out-of-compact generators is necessary to offset and subsidize the lower in-compact rates.¹² It was noted that in-compact waste has accounted for 20% of waste disposed at the Compact Facility since its opening, but has only accounted for 5% of Compact Facility revenue over the same time period. WCS testified that in-compact generators pay, on average, four times less than non-compact generators.¹³

WCS also explained that because the rate is established by TCEQ rule there is a nine to twelve month period in which changes to the rule are considered before the rule is finally adopted, including an opportunity for public comment on any proposal.¹⁴ This allows ample time for WCS's competitors to adjust their rate structures prior to WCS's implementation of any newly adopted TCEQ rate. The process of TCEQ establishing the rate by rule effectively gives WCS's

¹⁰ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

competitors time to preemptively undercut WCS' pricing, while WCS must wait the better part of a year to respond to changes in the market rates.¹⁵ WCS emphasized that their intention is not to raise rates for party state generators as shown by their commitment to retain the TCEQ rate as a maximum price for in-compact generators.¹⁶

ARDT, representing the in-compact generators, testified that they would like any changes to the rate structure to continue to guarantee in-compact generators a rate lower than out-of-compact generators. One justification for this request was due to their investment and efforts to develop a CWF.¹⁷ Rick Jacobi, former General Manager of the Texas Low-Level Radioactive Waste Disposal Authority (TLLRWDA), provided testimony on the background and original intent of the Compact Agreement.¹⁸ The TLLRWDA was a state agency charged with the original siting and development of a CWF.¹⁹ The TLLRWDA was unable to successfully secure a permit for the Sierra Blanca site which it had selected and ultimately the project did not move forward.²⁰ Mr. Jacobi testified that the Compact was entered into by Texas and Vermont solely for the purpose of developing a CWF which would give the two states discretion to accept waste from other states—not to provide low or subsidized pricing.²¹ As the original project did not envision accepting imports, Mr. Jacobi testified that pricing was not a consideration.²² However, once it was realized that the party states did not generate sufficient waste to financially support the operations of a CWF, the legislature authorized importing non-party state waste.²³

Committee Recommendations

The Committee recognized the intent of the rate rule, while acknowledging that current compliance regulations pose a risk to the financial viability of a private operator. The Committee expressed a desire to retain the spirit of the rate rule by providing low prices to in-compact generators but recognized that the contract review process has proven to be an impediment to WCS's desire to participate in the free market for out-of-compact waste. In the Committee's discussion of the rate rule and pricing issue, a number of possible solutions to the issues posed by the rate rule. The proposals included:

- Accepting WCS' request to untether non-compact waste from the rate rule
- Create a floating rate that is more adaptable to market conditions
- Develop quicker mechanisms to ensure compliance

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Advocates for Responsible Disposal in Texas).

¹⁸ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of now disbanded Texas Low-Level Radioactive Waste Disposal Authority). *NOTE:* The Texas Low-Level Radioactive Waste Disposal Authority is the predecessor oversight authority and is not to be confused with the current Texas Low-Level Radioactive Waste Disposal Compact Commission.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ *Id.*

III. Contract Review

WCS testified that their concern with the rate rule is the current method by which compliance is verified by TCEQ.²⁴ Currently, TCEQ reviews each individual contract prior to shipment in order to verify that party state generators are being charged less than the rate rule and that non-party generators are charged more. TCEQ is also statutorily required to confirm that all contracts are negotiated in good faith, in compliance with antitrust law, and nondiscriminatory.²⁵ In addition, TCEQ is required to review WCS contracts with in-compact generators within 30 days, but no time limitation exists for the review of the contracts WCS enters into with out-of-compact generators.²⁶ On average, TCEQ's review of the contracts for in-compact generators is completed in 28.7 days from the initial submittal. For out-of-compact generators, TCEQ completes the review in 140.2 days on average.²⁷ However, the range for which out-of-compact contracts are completed varies widely from 1-791 days.²⁸ TCEQ does work with WCS to prioritize the review of contracts that are most important to WCS.²⁹

The contract review process is complicated for a number of reasons which causes such a varying and lengthy review process. First, there is no standard industry contract and developing a boilerplate contract is impractical due to the nature of the complex factors that must taken into account such as waste classification, radioactivity, make up of waste, dose rates, and relative hazard.³⁰ Further, reviewing contracts for nondiscriminatory practices and compliance with antitrust laws is ambiguous and relies on an assumption that a comparison between customers can be readily made. In reality, every customer and shipment is unique, so a true comparison is extremely difficult.³¹

Additionally, since the contract review process is prospective, in actuality only hypothetical or assumed shipment factors can be utilized. Often the characteristics of what is actually shipped differs from what was detailed in a contract due to waste decays, volume reductions, various market factors and business decisions.³²

TCEQ has recently streamlined the contract review process to more efficiently satisfy their statutory requirements.³³ The new process requires WCS to submit each contract to TCEQ with information that demonstrates it satisfies the statutory requirements mentioned above (nondiscriminatory, complies with antitrust law, etc.).³⁴ After the submission of the contracts to

²⁴ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

²⁵ See Tex. Health & Safety Code § 401.2456.

²⁶ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of TCEQ).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

TCEQ, the contract may go into effect and WCS may accept and dispose of the waste.³⁵ To ensure compliance, WCS is now required to "provide quarterly reports with mathematical demonstrations showing that the contract prices comply with the statutory requirements for all shipments actually received for disposal during that period."³⁶ This allows for actual shipments rather than assumed shipments to be reviewed by TCEQ.

For this new contract review process to be practically implemented WCS will be required to include claw-back provisions in their contracts, so that if a shipment is found to be out of compliance WCS can retroactively address any non-compliance and take actions to make the necessary restitution.³⁷ For example, if it is found that a non-party generator received a rate lower than the rate rule, WCS would go back to the customer to remedy that error.³⁸ TCEQ does not currently dictate the terms of any claw-back provisions and allows WCS to draft these provisions, but WCS must certify to TCEQ that each contract contains a provision that provides for this sort of retrospective action.³⁹ If TCEQ finds that a contract is not in compliance, TCEQ would reject the contract until it is brought into compliance.⁴⁰

Stakeholder Input

As previously mentioned, WCS has requested that out-of-compact contracts be released from the rate rule.⁴¹ Doing so would eliminate the need for a contract review process for out-of-compact contracts. The contract review process would continue for in-compact contracts to ensure they are receiving a rate below the rate rule. As TCEQ has noted, party state contracts are reviewed and approved in a timely manner and are not at issue.⁴²

ARDT told the Committee that it generally opposes this proposal due to their opposition to untethering non-party state rates to the rate rule.⁴³ ARDT has suggested an alternative form to ensure compliance, which was not detailed at the interim hearing.⁴⁴ One recommendation made was to allow the party-state generators to annually audit WCS, which may present concerns regarding conflicts-of-interest and proprietary business information protections.

Committee Recommendations

The Committee expressed concerns with allowing private companies to audit another private company with whom they are actively negotiating contracts due to the inequitable negotiating position in which WCS would be placed.

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

⁴² See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of TCEQ).

⁴³ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Advocates for Responsible Disposal in Texas).

⁴⁴ *Id.*

The Committee further expressed concerns with adopting an alternative compliance mechanism without specificity in how it would be implemented. Absent a sufficient regulatory framework, if in-compact generators and WCS ever disagreed on compliance with a contract, a potential for routine litigation may be created.

The Committee recognized that untethering the out-of-compact rates would eliminate the need for a cumbersome contract review process. The Committee also discussed statutory changes that would allow TCEQ to review an aggregation of contracts rather than reviewing them on an individual basis. Practically speaking, TCEQ would review both in-compact and out-of-compact contracts over a certain period of time and compare the average rates for each to verify compliance.

IV. Fees and Surcharges

There are four statutorily required surcharges imposed on out-of-compact waste that amount to 31.25% of the contract price.⁴⁵ Three of the surcharges are imposed on in-compact waste that amount to 11.25% of the contract price. These fees were reduced through August 2019 to 16.25% and 6.25% respectively. Additionally, there is a \$10/ft³ assessed on both in-compact and non-compact waste. The fees assessed and where they are directed are as follows:

Amount	Waste	Deposited	Use
20%* (TX. Health & Safety Code § 401.207(g))	Non-Compact Waste Only	TCEQ's Environmental Perpetual Care Account (Account 5158)	Used for the decontamination, decommissioning, stabilization, reclamation, maintenance, surveillance, control, storage, and disposal of radioactive substances. Currently, used to clean up Lamprecht/Zamzow abandoned uranium mines in Live Oak County.
5%** (<i>Id.</i> at § 401.2445)	Both	General Revenue	N/A
5% (<i>Id.</i> at § 401.245)	Both	Andrews County	N/A
1.25% (<i>Id.</i> at § 401.246(a))	Both	TCEQ's Low-Level Radioactive Waste Account (Account 0088)	Used to fund the Compact Commission as required by the Compact Agreement

* Temporarily reduced to 10% for the 18-19 Biennium

** Temporarily eliminated for the 18-19 Biennium

The CWF accepted the first shipment of low-level waste for disposal in 2012. The amounts collected on an annual basis for each surcharge are as follows.⁴⁶

⁴⁵ See Tex. H.B. 2662, 85th Leg., R.S. (2017).

⁴⁶ Data provided by TCEQ March 2018.

	2012	2013	2014	2015	2016	2017	2018
20%	\$2,522,276	\$5,910,178	\$2,247,357	\$11,037,231	\$3,132,315	\$4,699,561	\$1,433,477
5%	\$630,689	\$1,500,969	\$999,629	\$2,841,271	\$887,563	\$1,251,350	\$256,846
5%	\$630,689	\$1,500,969	\$999,629	\$2,841,271	\$887,563	\$1,251,350	\$256,846
1.25%	\$0	\$372,341	\$252,731	\$710,318	\$221,898	\$312,837	\$123,835
TOTAL	\$3,783,654	\$9,284,457	\$4,499,346	\$17,430,091	\$5,129,339	\$7,515,098	\$2,071,004

Stakeholder Input

WCS noted that the surcharges are excessive when compared to those imposed on their competitors, which range from 5%-12%.⁴⁷ In order to offer competitive pricing WCS told the Committee that it must further reduce their prices to offset the additional cost of the surcharges to their customers.⁴⁸ WCS has requested that fees and surcharges be permanently reduced to align with the market rate of surcharges their competitors are required to assess.⁴⁹ ARDT has stated that they do not oppose a reduction in surcharges or fees but has not further defined their position.⁵⁰

Committee Recommendations

The Committee discussed the amount and purpose of the fees and surcharges assessed on both in-compact and out-of-compact waste. The Committee recognized that the default surcharge levels of 36.25% and 16.25% are excessive, especially in light of WCS's competitor's surcharges, and found that a reduction in fees may be reasonable. The Committee further recognized that reducing the surcharges would result in an increase in both in-compact and out-of-compact waste because WCS would be able to offer more competitive rates. The Committee considered that despite reducing the surcharges, the state may actually receive a greater financial benefit due to the increased volume of waste disposed that would be incentivized by lower surcharges.

⁴⁷ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Advocates for Responsible Disposal in Texas).

V. Capacity

WCS is permitted through TCEQ to dispose up to 9 million ft³ and 3.89 million curies (decay corrected). Since opening in 2012, WCS has disposed of approximately 120,000 ft³.⁵¹ Compact waste accounts for 24,538 ft³ and the remainder is attributable to imported waste.⁵²

Build-Out

Currently, WCS has a built-out capacity of 475,000 ft³. Much like a landfill the CWF is constructed in phases as additional capacity is needed, as it would be economically impractical and environmentally irresponsible to build out the entire permitted capacity at once. The next disposal cell is planned to have a capacity of 425,000 ft³.⁵³ It will cost approximately \$10.6 million and take 9-12 months to complete construction.⁵⁴

Import Limitations

The amount of imports WCS may accept is statutorily limited in two ways. First, the operator can dispose up to 30% of the *initial* licensed capacity (in both cubic feet and curies) of imported waste.⁵⁵ Second, the operator can dispose of no more than 275,000 curies/year of out-of-compact waste.⁵⁶ The initial license permitted disposal of 2.32 million ft³ and 1.167 million curies. This translates to 7.7% of currently licensed cubic feet and 15% of currently licensed curies. Based on data provided by in-compact generators, TCEQ projections show that the in-compact generator's capacity needs amount to 1,036,000 ft³.⁵⁷ By subtracting TCEQ's projection for in-compact generators and the statutory limit on out-of-compact waste from the current licensed volume of 9 million ft³, WCS is left with 7,271,000 ft³ or 81% of permitted capacity that will go unused under the current statutory limitations for out-of-compact waste.

⁵¹ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

⁵² *Id.*

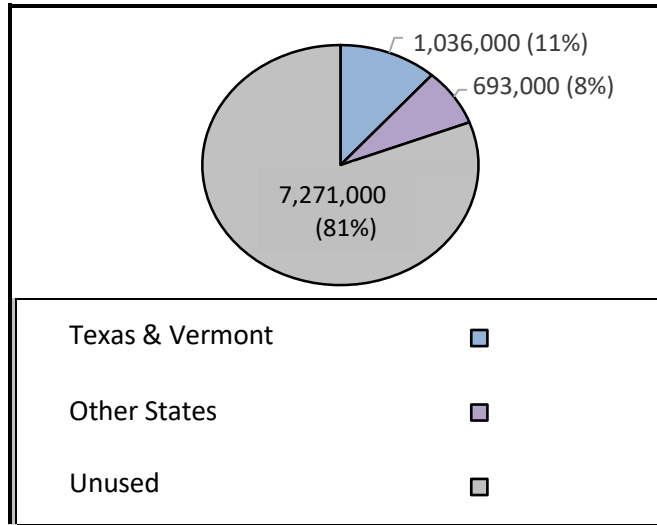
⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ See Tex. Health & Safety Code §401.207(e)(1)(B).

⁵⁶ See Tex. Health & Safety Code §401.207(e)(2).

⁵⁷ See TEX COMM'N. ENVTL. QUALITY, *Capacity Report for Low-level Radioactive Waste*, pub. no. SFR-104/16, (Nov. 2016) available at https://www.tceq.texas.gov/assets/public/comm_exec/pubs/sfr/104-16.pdf.



Stakeholder Input

WCS has requested several statutory changes to allow for increased imports. WCS testified that the statutory limit on out-of-compact waste constrains their ability to bid on larger more lucrative contracts that help to offset and subsidize the party state generators lower rates.⁵⁸ To date, WCS has not reached that annual limit. However, there are potential large scale disposals that could exceed the current annual limit on out-of-compact waste in a single year, or make it impossible to accept both smaller imports and a single large import.

First, WCS has requested that the waste receipt limitation of 30% of initial licensed capacity for out-of-compact waste be removed from statute. Instead, WCS would like TCEQ to set specific limits on out-of-compact waste based on their capacity reports. This will allow TCEQ to adjust the in-compact set-aside more easily, while also allowing WCS to fully utilize their total licensed capacity.⁵⁹ Second, WCS would like to eliminate the 275,000 curie per year limit on out-of-compact waste acceptance. WCS testified that this restriction is unnecessary to preserve capacity for in-compact waste since there are currently other regulations that serve that purpose.⁶⁰

ARDT has proposed alternative measures that could satisfy both parties objectives, which are to allow for increased imports while preserving as-built capacity for in-compact generators. The proposal would create triggering mechanisms that would require WCS to either complete an additional disposal cell or cease accepting imports.⁶¹

⁵⁸ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Advocates for Responsible Disposal in Texas).

Under ARDT's proposal operational waste would be distinguished from decommissioning waste. Most waste currently received at the Compact Facility is considered operational waste. Operational waste is a byproduct of the normal operations of a power plant, a hospital or a research institution and includes gloves, concrete, and other smaller items that are exposed to low doses of radiation. When a nuclear plant is decommissioned there are large scale items, like machinery, which must be disposed. This large scale waste resulting from the closure of a nuclear plant is termed decommissioning waste.⁶²

ARDT told the Committee that it would like to see three years of operational waste be available at all times, based on the average amount of waste disposed over the preceding five years. If WCS were to fail to meet this requirement the in-compact generators would halt all imports until the next disposal cell is complete, or until WCS has executed a performance bond that could be used to construct another disposal cell.⁶³ Regarding decommissioning waste, ARDT has asked that once a party state generator has provided the Nuclear Regulatory Commission with notice of intent to decommission (known as the Post-Shutdown Decommissioning Activities Report) WCS be required to construct adequate capacity for the waste planned from decommissioning.⁶⁴ Finally, ARDT has suggested that once the CWF has reached 80% of the licensed curie limit, WCS should be required to obtain a license amendment to increase the curie limit.⁶⁵

Committee Recommendations

The Committee recognized the balancing that is needed to ensure there is capacity for in-compact generators while also allowing WCS to accept imported waste to finance the operation and expansion of the facility. In discussing this balance a number of suggestions were made.

One suggestion was to aggregate the 275,000 annual curie limit over ten years, meaning the limit on imported waste would be 2.75 million curies over ten years. This would provide WCS with the flexibility to bid on potential larger contracts without eliminating or increasing the average annual curie limit.

The Committee noted that ARDT is requesting that capacity be guaranteed for in-compact waste without a guarantee that the in-compact generators will use the CWF, instead of the alternative disposal and storage options previously mentioned and currently being utilized by the in-compact generators. Furthermore, imposing such a requirement necessarily requires a capital investment by WCS, while at the same time impeding their ability to compete for profit generating contracts.

In light of this, the Committee also discussed imposing "take or pay" provisions. This would require the in-compact generators to either use the facility, or pay a fee for not meeting certain disposal quotas. This would likely be based on ARDT's suggested operational trigger that considers average historic volume disposed.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

Requiring the in-compact generators to prepay for capacity was also an option discussed. This would provide WCS with the capital necessary to build out capacity and also serve to incentivize in-compact generators to use the facility.

VI. Fixed Costs/Cost of a State-Operated Facility

WCS provided an estimate of the fixed costs of the entire site which included both the CWF and other profit generating activities such as the federal waste disposal site and hazardous waste site.⁶⁶ WCS calculated these estimates by averaging the last three years annual costs.⁶⁷ The breakdown is as follows:⁶⁸

Direct Cost and Overhead Cost	\$54 million
Selling, General & Administrative Cost	\$18 million
Interest Expense	\$6 million
Total Cost	\$78 million

WCS testified that the annual costs to operate the CWF amount to approximately \$34 million per year, while revenue specific to the CWF amounts to approximately \$24 million per year, resulting in an annual loss of \$10 million.⁶⁹ However, the true annual cost of operating the CWF alone would be higher because many compliance costs can be shared by both the CWF and other on-site activities.⁷⁰ For instance, the CWF is required to maintain certain security and environmental monitoring.⁷¹ Similarly, the RCRA facility and other activities must also maintain similar security and monitoring initiatives. Rather than having duplicative programs WCS has instead developed comprehensive programs that meet the requirements for all the activities on-site.⁷² As such, the expense of those programs is distributed among all on-site activities. If there were no other on-site activities, the cost of those programs would be solely attributable to the CWF and thus increase the annual fixed costs for the CWF.⁷³

This is important to note because if the state were required to take over the operations of the CWF it is unlikely the state would continue to operate the other on-site activities which generate the additional income. Therefore, the state's annual fixed costs would be greater than WCS' current annual fixed costs and, likewise the state's annual loss would exceed WCS' \$10 million per year loss.

⁶⁶ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

TCEQ stated that "the costs of a state-run facility are difficult to estimate because no truly comparable example exists".⁷⁴ However, TCEQ "strongly recommends" using the fixed costs data provided by WCS in calculating any estimate of the costs of a state-run facility.⁷⁵

Stakeholder Input

WCS reiterated that in-compact generators pay four times less than out-of-compact generators, and added that if the state were to operate the facility on a cost recovery basis it is likely that the rates for in-compact generators would likely increase 10-20 times what they currently are.⁷⁶

Committee Recommendations

The Committee discussed alternatives to having a private operator for the CWF as it currently exists. The Committee unanimously expressed concerns regarding the potential cost if the state were to operate the CWF.

Furthermore, when specifically asked if TCEQ possesses the requisite expertise to manage and operate a CWF, TCEQ acknowledged that they do not.⁷⁷ The Committee recognized that no existing state agency or office has the requisite expertise or ability to maintain and operate a CWF. The state would thus need to appropriate funds to secure a contractor to operate the site on the state's behalf.

VII. Contingency Plan

The compact agreement⁷⁸ imposes a number of requirements upon the State of Texas by virtue of its status as the host state. Development of a contingency plan, however, is not one of those responsibilities. It is the sole responsibility of the Compact Commission to develop a contingency plan, should the CWF need to be closed, or otherwise be unable to accept additional waste.⁷⁹ While the development of a comprehensive contingency plan has not been completed, the Compact Commission has taken some preliminary steps to create a plan, to the extent that they feel they are legally authorized to do so under the current language of the compact agreement.⁸⁰

⁷⁴ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of TCEQ).

⁷⁵ *Id.*

⁷⁶ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Waste Control Specialists).

⁷⁷ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of TCEQ).

⁷⁸ See Texas Low-Level Radioactive Waste Disposal Compact Consent Act, Pub. L. No. 105-236, 112 Stat. 1542 (1998). The Compact has been incorporated in state law and can be found in §403.006 of the Tex. Health & Safety Code.

⁷⁹ *Id.* at §3.04(7).

⁸⁰ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Texas Low-Level Radioactive Waste Compact Commission).

The Compact Commission stated in its testimony that should the Compact Commission determine that there is a threat to in-compact generators' capacity, imports would be halted and the Compact Commission would cease issuing import agreements.⁸¹ Halting imports and ceasing to issue import agreements could certainly be a part of a contingency plan, taking only those actions, however, does not address the logistics of reopening or utilizing an alternative site should the CWF need to be closed. This is an important consideration, as the State of Texas's obligation to provide a CWF for in-compact generators endures regardless of the current site's viability.⁸²

The Compact Commission, in its testimony, identified challenges it faces in fulfilling its mandate of developing a contingency plan. Specifically, the Compact Commission testified that despite the mandate to develop a contingency plan, they believe they lack sufficient funds to effectively develop and implement such a plan.⁸³ The Compact Commission also expressed reservation in directing the State of Texas to take prescribed actions without state input since the state would bear the financial burden of implementing and enforcing a contingency plan, should it become necessary.

Another issue the Compact Commission identified as a challenge to fulfilling its mandate is the lack of clarity from the state in designating an agency or office to assist the Compact Commission in development of a plan. In response to this concern, the Compact Commission requested that the State of Texas designate an agency or office to serve as their counterpart to collaborate with the Compact Commission in the development of a plan.⁸⁴ Committee members suggested TCEQ would be a logical option, given their level of expertise in environmental permitting and enforcement, and requested that the Compact Commission and TCEQ provide specific details of a comprehensive contingency plan along with areas where clarity from the legislature would be helpful. Specifically, the Committee members requested that, by January 1, 2019, the Compact Commission identify, broadly, the necessary elements of a comprehensive contingency plan, and include in the development of the necessary elements, an overview of ways the legislature could provide clarity to assist the Compact Commission in the implementation of a contingency plan.⁸⁵ An example that was offered was the legislature delineating a clear statutory chain of authority to implement and monitor a contingency plan.⁸⁶

Committee Recommendations

In response to the testimony provided by the Compact Commission, the Committee expressed serious concerns that a comprehensive contingency plan has yet to be developed, notwithstanding the Compact Commission's reservations about directing the state to take

⁸¹ *Id.*

⁸² See Texas Low-Level Radioactive Waste Disposal Compact Consent Act, Pub. L. No. 105-236, 112 Stat. 1542 (1998) §§4.04(1), 4.04(6).

⁸³ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018) (testimony of Texas Low-Level Radioactive Waste Compact Commission).

⁸⁴ *Id.*

⁸⁵ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018).

⁸⁶ *Id.*

prescribed actions without input from a designated state office or agency.⁸⁷ While the Committee recognized that the Compact Commission does not have authority to access funds to implement the plan, it stated that the legislature could appropriate those funds separately, should the need arise to implement the plan.

⁸⁷ See *Interim Hearing: The Tex. Low-Level Radioactive Waste Disposal Compact Facility Legislative Oversight Comm.*, 85th Leg., (Tex. 2018).